

Our Professional Staff

Cindy Davis, certified purity and germination analyst, breaking down a sample for purity testing.



Maryanne Triggs, certified purity analyst, conducting a purity test on a sample of Kentucky bluegrass.



Sandie Daley, certified germination analyst, conducting a purity test on barley seed.



Terri Cox, certified germination analyst, conducting a noxious weed test on a wheatgrass sample.



Nancy Hartshorn, RST, certified purity and germination analyst, conducting testing on a referee sample.



Carol Webley, certified germination analyst, planting a sample of wheatgrass for a germination test.



Linda Rainey, germination analyst, planting a grain sample using a vacuum planter.



Seed Kinds We Test

Seed kinds tested by WSDA Seed Program include, but are not limited to:

Grasses: Turf and Range

Cereal grains

Vegetable seeds

Row crop seeds

Legume seeds

Native species

Brassica species

Please contact us for any seed kinds or tests not listed.

Seed Lab Testing Backlog

For backlog information, updated twice daily, please visit our web site at:

<http://agr.wa.gov/Inspection/SeedInspection>

Pure Harvest™

To view your reports online, contact Victor Shaul for information and password setup to use Pure Harvest™.

WSDA Seed Field Inspection

The field inspection staff consists of three full time and nine intermittent inspectors inspecting 54,263 acres of alfalfa, beans, clover, corn, flax, turf, forage and native grasses, peas, rapeseed, woody plants and forbs, and numerous other small seeded vegetable crops.

Inspections are conducted for genetic purity, pests, disease, weed contamination, and confirmation of truthful and lawful labeling of the marketed seed.

Field inspectors certify crops in the field, conduct phytosanitary inspections for specified diseases, inspect conditioning plants, and conduct seed control inspections according to State and Federal seed laws.



AGR PUB 651-116 (N/10/04)

Inquiries regarding the availability of this publication in an alternate format should be directed to the WSDA Receptionist at (360) 902-1976 or Telecommunication Device for the Deaf (360) 902-1996.

Washington State Department of Agriculture

Seed Program

Quality Seed Testing & Certification Services



*Where it's a Pleasure to Serve You
and Your Seed Testing Needs*

Mission Statement

The WSDA Seed Program is committed to providing accurate, timely, highest quality field inspections, seed analysis, phytosanitary services and related certification services while continually striving for improvement in methods and technologies to assure our success and the success of our stakeholders.

WSDA Seed Program

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Tests We Conduct

*All testing is conducted using
AOSA rules and guidelines*

Purity Test: This test consists of a working sample containing two parts. Part one consists of the purity analysis, which includes a separation of inert matter, weed seeds and other crop seeds from the pure seed portion. Other crop seeds and weed seeds are reported by percentage and number per pound. Part two consists of the noxious analysis. A search is done for all Washington State prohibited and restricted noxious weeds. Results are reported by number per pound from the entire working sample.

All States Noxious (ASN) Test: This test is conducted by searching the entire working sample for weed seeds that are listed on the All States Noxious list. The findings are reported by number per pound. An All States Noxious Test may be requested alone, however, an Undesirable Grass Spp. test can only be conducted in conjunction with an ASN test.

Undesirable Grass Spp. Test: This test is conducted by searching for seeds that are restricted in certain states as listed in "State Noxious-Weed Seeds Requirements Recognized in the Administration of the Federal Seed Act". This test is conducted only in conjunction with an All States Noxious Test.

Sod Quality Test: This test consists of a search for contaminants listed in the Sod Quality standards. These are reported by number per pound. The Sod Quality Test is conducted in conjunction with a purity analysis.

Crop and Weed Exam: This test is done to search for all crop and weed seeds found in the working sample. The results are reported by number per pound.

Seed Counts Test: This is a report of the number of seeds per pound in the submitted sample.

Germination Test: The germination test has the ability to determine the potential of a seed lot when planted under optimum conditions. The germination test provides valuable information for marketing and is found on the analysis tag. Farmers can use this information to determine planting rates and storage conditions needed.

Four hundred seeds are planted per germination test in replicates of 100 seeds each. The samples are

germinated using the prescribed temperatures, light and number of days required for the seeds being tested. At the end of the test, the seedlings are evaluated to determine the percentage of normal viable seeds in the lot.

Fluorescence Test: This test determines the percent of annual and perennial ryegrass in a submitted sample. The roots of the annual ryegrass will fluoresce as white lines when placed under an ultraviolet light. Some perennial types now have variables that fluoresce when placed under a light. Varieties of perennial ryegrass with fluorescent levels are recognized and published by the "AOSCA (Association of Official Seed Certifying Agencies) National Grass Variety Review Board".

Ammonia Test: This test is used to determine the presence of hard fescue contaminants in a submitted sample of red fescue or the presence of red fescue in hard fescue. The roots of the red fescue fluoresce yellow while the roots of the hard fescue fluoresce green when sprayed with a 0.5 percent ammonia solution and placed under an ultraviolet light.

Sodium Hydroxide Test: This procedure is outlined in the AOSA Cultivar Purity Testing Handbook. The test is used to distinguish red wheat from white wheat in samples where the varieties are similar in color or weather damaged.

Moisture Test: This test determines the moisture content of a seed lot. Seeds must be submitted to the lab in moisture-proof containers to assure that the results are a true reflection of the moisture content of a seed lot.

Dormant Seed Test: This test determines the amount of dormant seeds in a submitted sample at the end of the germination test by using the TZ method recognized by AOSA on firm un-germinated seed.

ISTA and/or Canadian Test: These tests are conducted using either International Rules for Seed Testing (ISTA) or Canadian Methods and Procedures (Canadian Test) for purity, germination and TZ tests. Other tests such as moisture and vigor tests can be conducted using ISTA or Canadian testing rules.

Phytosanitary Exam: This test is required to identify weed seeds, pests or diseases listed as phyto contaminants. Depending on the seed kind, phytosanitary regulations are specific to each country.

Soil Exam: This exam is a search for soil particles in a submitted sample of seeds. This test is often combined with a Phytosanitary Exam. Some countries allow a small amount of soil in seed lots when being imported and other countries have a zero tolerance for soil.

Digital Photographs: To better serve the needs of our customers, we have recently started offering digital photographs of germination, TZ and purity tests. This service is available at a minimal cost, and such digital photos can be sent via e-mail. Please contact us for more information.

Vigor Tests

Cold Test: This test is offered for grain seed. The seeds are planted in soil and kept at a temperature of 10°C (50°F) for 7 days during which time they are stressed from imbibition, cold temperature, and soil microorganisms. Following the cold temperature period, they are moved to favorable growing conditions specific to the crop.

Accelerated Aging Test: Prior to germination, seeds are placed in an accelerated chamber where the relative humidity is kept at 100 percent at 40° to 45° depending on the seeds being tested. Following the stress period, the seeds are germinated according to AOSA rules for the standard germination test. This test has been successful in predicting the relative storability of seed lots.

Tetrazolium (TZ) Test: This determines the potential germination of a submitted sample of seed. A red pigment called formazan is formed in the actively respiring cells of the living tissue. The staining patterns and intensity may be used to predict seed vigor and viability.

Mechanical Damage Testing

Fast Green Test: This test reveals physical fractures in seed coats, using a stain that shows any area of the seed which has lost its physical integrity by staining it green.